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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
LY, NGHI H

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
03/11/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Summary	09/447,284	CAO ET AL.	
	Examiner	Art Unit	
	NGHI H. LY	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 February 2010</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,2,4,5,9,10,19,20 and 30-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,2,4,5,9,10,19,20 and 30-39</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to
> a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

2.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1, 2, 4, 5, 9, 10, 19, 20 and 30-39 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Sato (JP07212829A) in view of Borland et al (US 6,556,965)

and further in view of Tuoriniemi et al (US 5,978,689).

Regarding claim 1, Sato teaches a cordless telephone (see Title and Abstract),

comprising: a remote handset (see Drawing handset 37), a base unit matched to the

remote handset (see Drawing base unit 24), and an audio player integrated within at

least one of the remote handset and the base unit (see Title, Abstract and Detailed
Description).

Sato does not specifically disclose an MPEG audio integrated within <u>at least **one**</u>
of the remote handset and the base unit.

Borland teaches an MPEG audio integrated within <u>at least **one**</u> of the remote
handset and the base unit (see Abstract, column 5, lines 37-40, column 4, lines 7-21,
see "MP3", and column 4, lines 48-66, see "MPEG" and see "MP3", also see column 3,
line 65 to column 4, line 7, see "MPEG" and see column 5, lines 24-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the
time the invention was made to provide the teaching of Borland into the system of Sato
in order to provide a method for communicating an audio signal with an extended
frequency range over a telephone network (see Borland, column 3, lines 12-13).

The combination of Sato and Borland does not specifically disclose a summer
adapted to digitally sum a digitally synthesized ring tone with an audio bit stream to
allow a user of the telephone to hear the telephone ringing along with music.

Tuoriniemi teaches a summer adapted to digitally sum a digitally synthesized ring
tone with an audio bit stream to allow a user of the telephone to hear the telephone
ringing along with music (see column 6, lines 39-43, see "*listen to an audio program
while being able to hear telephone audio ring signals….*").

Therefore, it would have been obvious to one of ordinary skill in the art at the
time the invention was made to provide the teaching of Tuoriniemi into the system of

Sato and Borland so that the user won't miss the telephone call while enjoy listening to music.

Regarding claim 2, the combination of Sato, Borland and Tuoriniemi teaches the MPEG audio player is integrated within the remote handset (see Sato, Title, Abstract and Detailed Description, and/or see Borland, column 5, lines 24-28).

Regarding claims 4 and 5, the combination of Sato, Borland and Tuoriniemi further teaches the MPEG audio player is an MP3 (see Borland, Abstract, "MP3", column 4, lines 7-21, "MP3").

Regarding claims 9 and 19, Sato teaches a method of integrating an MPEG audio player in a cordless telephone (see Title and Abstract) comprising: playing of the pre-loaded music from the remote handset of a cordless telephone (see Title, Abstract and Detailed Description), connecting a base unit of the cordless telephone to a public switch telephone network (the base unit of cordless telephone of Sato inherently connect to a public switch telephone network).

Sato does not specifically disclose a method of integrating an MPEG audio player in a cordless telephone and playing of the pre-loaded MP3.

Borland teaches a method of integrating an MPEG audio player in a cordless telephone and playing of the pre-loaded MP3 (see column 5, lines 24-28 and column 4, lines 27-33, see "storage in portable systems" and column 4, lines 43-47, see "playback").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Borland into the system of Sato in order to provide high quality audio signal (see Borland, Abstract).

The combination of Sato and Borland does not specifically disclose digitally summing a digitally synthesized ring tone with an audio bit stream to allow a user of the telephone to hear the telephone ringing along with music, and muting the playing of the pre-loaded music when the remote handset is active in a current telephone call.

Tuoriniemi teaches digitally summing a digitally synthesized ring tone with an audio bit stream to allow a user of the telephone to hear the telephone ringing along with music (see Tuoriniemi, column 6, lines 39-43, see "*listen to an audio program while being able to hear telephone audio ring signals….*"), and muting the playing of the pre-loaded music (see column 9, lines 17-20) when the remote handset is active in a current telephone call (see column 7, lines 49-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Tuoriniemi into the system of Sato and Borland so that the user won't miss the telephone call while enjoy listening to music.

Regarding claims 10 and 20, the combination of Sato, Borland and Tuoriniemi further teaches muting pauses the playing of the pre-loaded music (see Tuoriniemi, column 9, lines 17-20).

Regarding claims 30 and 31, the combination of Sato, Borland and Tuoriniemi further teaches the base unit is adapted (i) to receive from a telephone line a telephone

audio signal representing a telephone conversation and (ii) to transmit the telephone

audio signal to said remote handset (see Borland, column 5, lines 24-28 and column 4,

lines 27-33, see "storage in portable systems" and column 4, lines 43-47, see

"playback"), the telephone conversation with the MPEG audio bit stream (see Borland,

Abstract, column 5, lines 37-40, column 4, lines 7-21, see "MP3", and column 4, lines

48-66, see "MPEG" and see "MP3", also see column 3, line 65 to column 4, line 7, see

"MPEG" and see column 5, lines 24-28) and said summer is further adapted to digitally

sum the telephone audio signal representing the telephone conversation with the audio

bit stream (see Tuoriniemi, see column 6, lines 39-43, see "*listen to an audio program*

while being able to hear telephone audio ring signals….").

Regarding claim 32, 33, 34, 38 and 39, the combination of Sato, Borland and

Tuoriniemi further teaches both said MPEG audio player (see Borland, Abstract, column

5, lines 37-40, column 4, lines 7-21, see "MP3", and column 4, lines 48-66, see "MPEG"

and see "MP3", also see column 3, line 65 to column 4, line 7, see "MPEG" and see

column 5, lines 24-28), the digitally synthesized ring tone with the MPEG audio bit

stream (see Borland, Abstract, column 5, lines 37-40, column 4, lines 7-21, see "MP3",

and column 4, lines 48-66, see "MPEG" and see "MP3", also see column 3, line 65 to

column 4, line 7, see "MPEG" and see column 5, lines 24-28), and said summer are

jointly implemented as a single digital signal processor adapted to digitally sum the

digitally synthesized ring tone with the audio bit stream (see Tuoriniemi, column 6, lines

39-43, see "*listen to an audio program while being able to hear telephone audio ring*

signals….").

Regarding claim 35, the combination of Sato, Borland and Tuoriniemi further teaches the base unit receiving from the PSTN a telephone audio signal representing a conversation (see Sato, Title, Abstract and Detailed Description and the base unit of cordless telephone of Sato inherently connect to a public switch telephone network), the base unit transmitting the telephone audio signal to the remote handset, the telephone conversation with the MPEG audio bit stream (see Borland, Abstract, column 5, lines 37-40, column 4, lines 7-21, see "MP3", and column 4, lines 48-66, see "MPEG" and see "MP3", also see column 3, line 65 to column 4, line 7, see "MPEG" and see column 5, lines 24-28), and the remote handset digitally summing the telephone audio signal representing the telephone conversation with the audio bit stream (see Tuoriniemi, column 6, lines 39-43, see "*listen to an audio program while being able to hear telephone audio ring signals….*").

Regarding claim 36, the combination of Sato, Borland and Tuoriniemi further teaches the telephone audio signal is monaural, and the MPEG audio bit stream has a plurality of stereo channels (see Borland, column 5, lines 24-28 and column 4, lines 27-33, see "storage in portable systems" and column 4, lines 43-47, see "playback"), and the step of the telephone audio signal with the MPEG audio bit stream comprises the monaural telephone audio signal into each of the plurality of stereo channels of the MPEG audio bit stream (see Borland, Abstract, column 5, lines 37-40, column 4, lines 7-21, see "MP3", and column 4, lines 48-66, see "MPEG" and see "MP3", also see column 3, line 65 to column 4, line 7, see "MPEG" and see column 5, lines 24-28), the step of digitally summing the telephone audio signal with the audio bit stream comprises

digitally summing the monaural telephone audio signal into each of the plurality of

stereo channels of the audio bit stream (see Tuoriniemi, column 6, lines 39-43, see

"*listen to an audio program while being able to hear telephone audio ring signals….*"),

such that a sense of balance in the user is improved (see Tuoriniemi, column 6, lines

39-43, see "*listen to an audio program while being able to hear telephone audio ring*

signals….").

        Regarding claim 37, the combination of Sato, Borland and Tuoriniemi further

teaches the steps of (i) playing pre-loaded MP3 music from the remote handset of said

cordless telephone (see Borland, column 5, lines 24-28 and column 4, lines 27-33, see

"storage in portable systems" and column 4, lines 43-47, see "playback"), the telephone

audio signal with the MPEG audio bit stream (see Borland, Abstract, column 5, lines 37-

40, column 4, lines 7-21, see "MP3", and column 4, lines 48-66, see "MPEG" and see

"MP3", also see column 3, line 65 to column 4, line 7, see "MPEG" and see column 5,

lines 24-28), and (ii) digitally summing the telephone audio signal with the audio bit

stream are performed by a single digital signal processor (see Tuoriniemi, column 6,

lines 39-43, see "*listen to an audio program while being able to hear telephone audio*

ring signals….").

                                    Response to Arguments

5.   Applicant's arguments with respect to claims 1, 2, 4, 5, 9, 10, 19, 20 and 30-39

have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to NGHI H. LY whose telephone number is (571)272-7911.

The examiner can normally be reached on 9:30am-8:00pm Monday-Thursday.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

/Nghi H. Ly/
Primary Examiner, Art Unit 2617